

# Product datasheet

Specifications



## TeSys F contactor - 4P(4 NO) - AC-1 - <= 440 V 500 A - without coil

LC1F4004

! To be discontinued on: Dec 31, 2023

! To be discontinued

### Main

Range	TeSys
Product Name	TeSys F
Product Or Component Type	Contacteur
Device Short Name	LC1F
Contacteur Application	Resistive load
Utilisation Category	AC-1
Poles Description	4P
Power Pole Contact Composition	4 NO
[Ue] Rated Operational Voltage	<= 1000 V AC 50/60 Hz <= 460 V DC
[Ie] Rated Operational Current	500 A (at <40 °C) at <= 440 V AC AC-1

### Complementary

[Uc] Control Circuit Voltage	48...1000 V AC 40...400 Hz with LX1/LX9 coil 48...440 V DC with LX4 coil 100...250 V AC 50/60 Hz with LXE coil 100...380 V DC with LXE coil
[Uimp] Rated Impulse Withstand Voltage	8 kV
Overvoltage Category	III
[Ith] Conventional Free Air Thermal Current	500 A (at 40 °C)
Irms Rated Making Capacity	4000 A AC conforming to IEC 60947-4-1
Rated Breaking Capacity	3200 A conforming to IEC 60947-4-1
[Icw] Rated Short-Time Withstand Current	3600 A 40 °C - 10 s 2400 A 40 °C - 30 s 1700 A 40 °C - 1 min 1200 A 40 °C - 3 min 1000 A 40 °C - 10 min
Associated Fuse Rating	400 A aM at <= 440 V 500 A gG at <= 440 V
Average Impedance	0.26 mOhm - Ith 500 A 50 Hz
[Ui] Rated Insulation Voltage	1000 V conforming to IEC 60947-4-1 1500 V conforming to VDE 0110 group C
Power Dissipation Per Pole	65 W AC-1

<b>Control Circuit Voltage Limits</b>	Operational: 0.85...1.1 Uc AC 40...400 Hz with LX1/LX9 coil Drop-out: 0.3...0.5 Uc AC 40...400 Hz with LX1/LX9 coil Operational: 0.85...1.1 Uc DC with LX4 coil Drop-out: 0.2...0.35 Uc DC with LX4 coil Operational: 85...275 V AC 50/60 Hz with LXE coil Drop-out: 0...60 V AC 50/60 Hz with LXE coil Operational: 85...418 V DC with LXE coil Drop-out: 0...45 V DC with LXE coil
<b>Heat Dissipation</b>	14 W 2.2...5.5 W
<b>Operating Time</b>	40...75 ms closing for with LX1/LX9 coil 100...170 ms opening for with LX1/LX9 coil 50...60 ms closing for with LX4 coil 45...60 ms opening for with LX4 coil 40...80 ms closing for with LXE coil 6...54 ms opening for with LXE coil
<b>Mounting Support</b>	Plate
<b>Standards</b>	JIS C8201-4-1 IEC 60947-4-1 IEC 60947-1 EN 60947-4-1 EN 60947-1
<b>Product Certifications</b>	CB ABS DNV RMRoS LROS (Lloyds register of shipping) BV RINA UL CSA UKCA
<b>Connections - Terminals</b>	Power circuit: bar 2 cable(s) - busbar cross section: 30 x 5 mm Power circuit: lugs-ring terminals 2 cable(s) 150 mm <sup>2</sup> Control circuit: screw clamp terminals 1 cable(s) 1...4 mm <sup>2</sup> flexible without cable end Control circuit: screw clamp terminals 2 cable(s) 1...4 mm <sup>2</sup> flexible with cable end Control circuit: screw clamp terminals 1 cable(s) 1...4 mm <sup>2</sup> flexible with cable end Control circuit: screw clamp terminals 2 cable(s) 1...2.5 mm <sup>2</sup> solid without cable end Control circuit: screw clamp terminals 1 cable(s) 1...4 mm <sup>2</sup> Control circuit: screw clamp terminals 2 cable(s) 1...4 mm <sup>2</sup> Control circuit: screw clamp terminals 1.0 cable(s) 0.2...2.5 mm <sup>2</sup> flexible without cable end Control circuit: screw clamp terminals 1.0 cable(s) 0.25...2.5 mm <sup>2</sup> flexible with cable end Control circuit: screw clamp terminals 1.0 cable(s) 0.2...2.5 mm <sup>2</sup> solid without cable end
<b>Tightening Torque</b>	Power circuit: 35 N.m Control circuit: 1.2 N.m Control circuit: 0.6 N.m
<b>Mechanical Durability</b>	10 Mcycles
<b>Inrush Power In Va</b>	1000...1150 VA, 40...400 Hz cos phi 0.9 (at 20 °C)with LX1/LX9 coil 920...1140 VA (at 20 °C)with LX4 coil 360...470 VA, 50/60 Hz cos phi 0.5 (at 20 °C)with LXE coil 410...450 VA (at 20 °C)with LXE coil
<b>Hold-In Power Consumption In Va</b>	12...18 VA, 40...400 Hz cos phi 0.9 (at 20 °C)with LX1/LX9 coil 4...7.5 VA (at 20 °C)with LX4 coil 4.5...7.0 VA, 50/60 Hz cos phi 0.5 (at 20 °C)with LXE coil 2.5...4.0 VA (at 20 °C)with LXE coil
<b>Maximum Operating Rate</b>	2400 cyc/h 55 °C
<b>Compatibility Code</b>	LC1F

## Environment

<b>Ip Degree Of Protection</b>	IP20 front face with shrouds conforming to IEC 60529 IP20 front face with shrouds conforming to VDE 0106
--------------------------------	---

<b>Protective Treatment</b>	TH
<b>Ambient Air Temperature For Operation</b>	-5...55 °C
<b>Ambient Air Temperature For Storage</b>	-60...80 °C
<b>Permissible Ambient Air Temperature Around The Device</b>	-40...70 °C
<b>Operating Altitude</b>	3000 m without derating
<b>Mechanical Robustness</b>	Vibrations contactor open: 1.5 Gn, 5...300 Hz Vibrations contactor closed: 5 Gn, 5...300 Hz Shocks contactor open: 6 Gn for 1/2 sine wave (11 ms) Shocks contactor closed: 15 Gn for 1/2 sine wave (11 ms)
<b>Height</b>	206 mm
<b>Width</b>	261 mm
<b>Depth</b>	219 mm
<b>Net Weight</b>	8 kg

## Packing Units

<b>Unit Type Of Package 1</b>	PCE
<b>Number Of Units In Package 1</b>	1
<b>Package 1 Height</b>	25.600 cm
<b>Package 1 Width</b>	25.400 cm
<b>Package 1 Length</b>	30.200 cm
<b>Package 1 Weight</b>	9.712 kg
<b>Unit Type Of Package 2</b>	P06
<b>Number Of Units In Package 2</b>	8
<b>Package 2 Height</b>	77.000 cm
<b>Package 2 Width</b>	80.000 cm
<b>Package 2 Length</b>	60.000 cm
<b>Package 2 Weight</b>	89.620 kg

## Contractual warranty

<b>Warranty</b>	12 months
-----------------	-----------

## Sustainability

**Green Premium™ label** is Schneider Electric's commitment to delivering products with best-in-class environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO<sub>2</sub> products.

**Guide to assessing product sustainability** is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

[Learn more about Green Premium >](#)

[Guide to assess a product's sustainability >](#)



Transparency RoHS/REACH

## Well-being performance

Mercury Free

RoHS Exemption Information Yes

## Certifications & Standards

Reach Regulation [REACH Declaration](#)

Eu RoHS Directive Compliant with Exemptions

China RoHS Regulation [China RoHS declaration](#)  
Product out of China RoHS scope. Substance declaration for your information

Environmental Disclosure [Product Environmental Profile](#)

Weee The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

Circularity Profile [End of Life Information](#)